

WHAT IS CLAIMED IS:

1. A method for facilitating removal of foreign material associated with workpieces using a mobile furnace, the method comprising:

providing said mobile furnace with a shell defining a combustion chamber, the shell including a shell body and a cover pivotably mounted to the shell body, at least one wheel for supporting the shell so as to make the furnace mobile, and a support device disposed within the shell and operatively connected to the cover for supporting a workpiece in the combustion chamber;

moving the mobile furnace to a first location;

placing a workpiece on the support device;

heating the workpiece in the furnace for a time period and at a temperature sufficient to facilitate removal of foreign material associated with the workpiece;

removing the workpiece from the furnace; and

transporting foreign material burned in the furnace to a second location including placing the workpiece on a support device operatively connected to a cover of the furnace.

2. The method of claim 1, wherein the temperature is at least 700°F.

3. A method for removing foreign material from workpieces, comprising:

providing a furnace;

heating a workpiece in said furnace for a time and at a temperature sufficient to heat said foreign material and a surface of said workpiece while preventing thermal migration to a core of said workpiece.

4. The method according to claim 3, wherein said heating prevents

deformation of said workpiece.

5. The method according to claim 3, wherein said heating prevents degradation of thermal treatment parameters.

6. The method according to claim 3, wherein said heating is flash heating.

7. The method according to claim 6, wherein the heating follows a temperature curve from ambient to 900°F in about thirty seconds.

8. The method according to claim 3, further comprising the step of having a controlled cool down rate.

9. The method according to claim 3, wherein said heating is controlled by a programmed microprocessor for controlling time and temperature.

10. The method according to claim 3, wherein the furnace is a mobile furnace.

11. A method for removing foreign material from a workpiece, comprising:  
providing a furnace;  
placing said workpiece within said furnace;  
heating said workpiece in said furnace for a time period and at a temperature so as to remove said foreign material while preventing deformation of said workpiece and preventing degradation of thermal treatment parameters of said workpiece;

wherein thermal migration is prevented between a surface of said workpiece and a core of said workpiece.

12. The method according to claim 11, wherein the temperature is 900°F and the time period is approximately thirty seconds.

13. The method according to claim 11, wherein said workpiece is an automobile part.

14. The method according to claim 13, wherein the part is an automobile fender.

15. The method according to claim 13, wherein the part is an automobile rim.

16. The method according to claim 11, wherein the heating is flash heating.